Videoconferencing user guide

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Melbourne Children's
Excellence in clinical care, research and education
The Royal Children's Hospital Melbourne
Murdoch Childrens Research Institute
The University of Melbourne

Videoconference defined

Sharing of video and audio via a dedicated connection, using specialised equipment (videoconference codec) or software, and via standardised telephony protocols.

Not a videoconference:

Teleconference = audio-only, via telephone

Web-conference = uses proprietary software and protocols (eg Vidyo, WebEx, GoToMeeting, Skype etc)

What is required

- A videoconference unit (also referred to as endpoint or codec)
- Connection to the internet
- Exchange of connection details (eg IP address or ISDN number)

Common terms

- **Near end**: the site you are at (eg RCH)
- **Far end**: the remote site (eg Monash Children's)
- **Bridge**: a facility to join multiple sites in one conference (a.k.a. Multipoint Conference)
- **Content**: the video signal from a PC (eg Powerpoint) as opposed to the signal from a camera

Types of connections

IP = Internet Protocol

The video and audio data is transmitted/received over the internet. There is no call cost. The quality is usually higher. An IP address looks like this: 203.101.203

ISDN = Integrated Services for Digital Network

The video and audio data is transmitted/received over specialised telephone connections. The site placing the call incurs call costs. The quality is restricted and there are sometimes problems sharing content from a PC. An ISDN number looks like a phone number.

RCH facilities

Cisco Telepresence equipment with HD video capability

Roll-about unit

ENDPOINTS

- 4 x roll-about units
- Fixed units in HELP CLS spaces
- Fixed unit in Ella Latham Auditorium
- Fixed unit in RCH Boardroom
- Fixed units in Operating Theatres 9, 11, 12

MULTIPOINT CONTROL UNIT

- Allows up to 12 endpoints (internal and external to connect to the same conference)

ISDN GATEWAY

- Allows incoming and outgoing calls using ISDN protocol

CONTENT SERVER

- Allows audio-visual recording via endpoints

Roll-about unit locations

- UNIT 1 – Educational Resource Centre (please do not book this unit)
- UNIT 2 – Clinical Offices, Level 3 West Building (near Respiratory Medicine)
- UNIT 3 – East Building Level 2 (2.716)
- UNIT 4 – East Building Level 2 (reception K)

Dial-in details for roll-about units

These are the details you can provide to the far end to connect to your unit at RCH

UNIT	IP addresses	ISDN no.
Unit 2	74707@203.16.41.14 or 203.16.41.14##74707	0383474707
Unit 3	74708@203.16.41.14 or 203.16.41.14##74708	0383474708
Unit 4	74709@203.16.41.14 or 203.16.41.14##74709	0383474709

Booking a roll-about unit

- Create a meeting request via Outlook
- Select an appropriately-sized and/or nearby meeting room
- Select the available roll-about unit

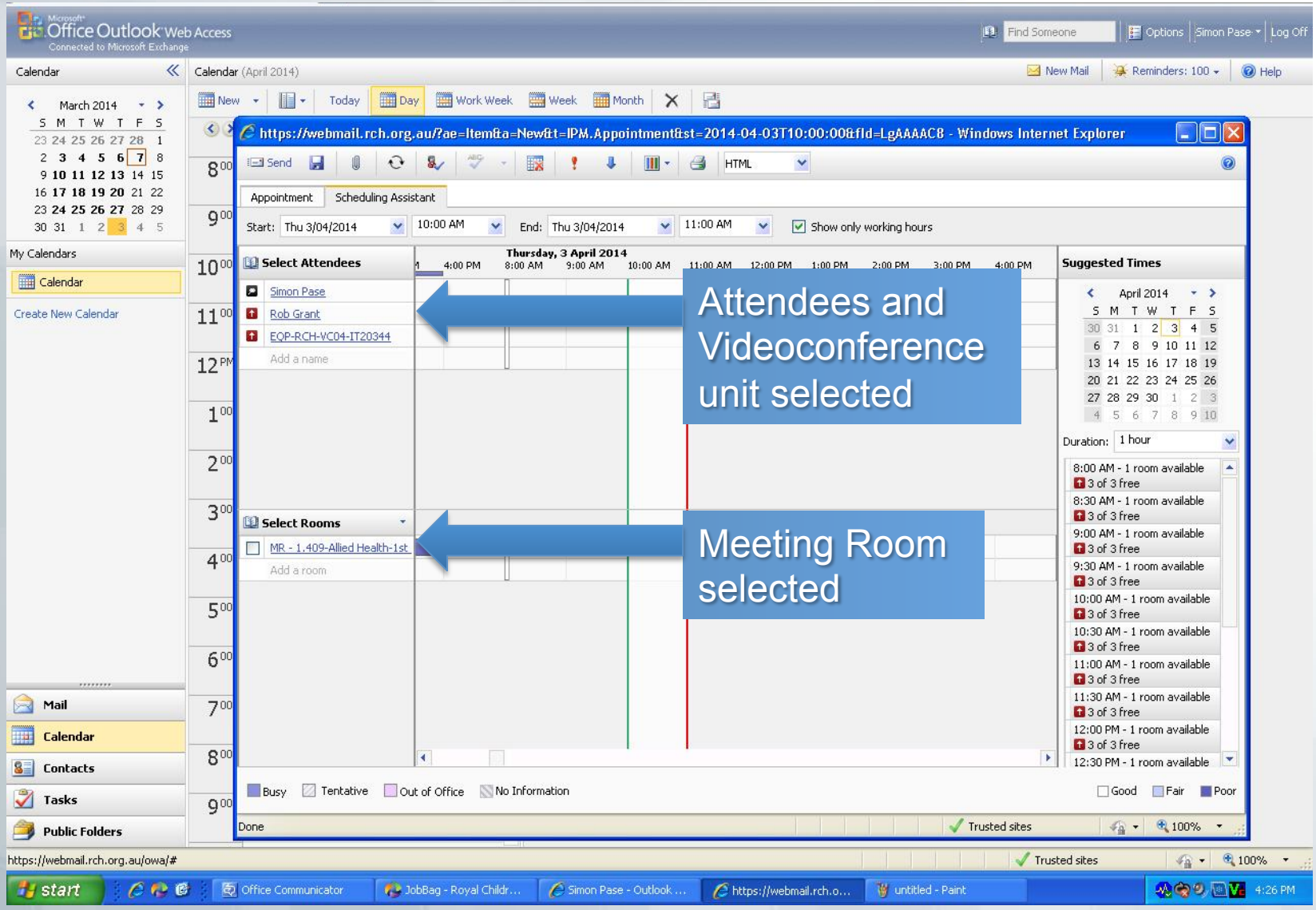
The roll-about units have the following addresses in Outlook

UNIT 2: **eqp-rch-vc02**

UNIT 3: **eqp-rch-vc03**

UNIT 4: **eqp-rch-vc04**

UNIT 1 is located in ERC. **Please do not book this unit** as it is kept free for urgent conferences, court appearances, testing etc.



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Rooms in HELP with videoconference facilities

The following rooms in the Health Education Learning Precinct have built-in videoconference facilities:

1.046A	1.046B	1.047
1.048	1.051	1.052
1.053	Vernon Collins Lecture Theatre	

Booking a room in HELP

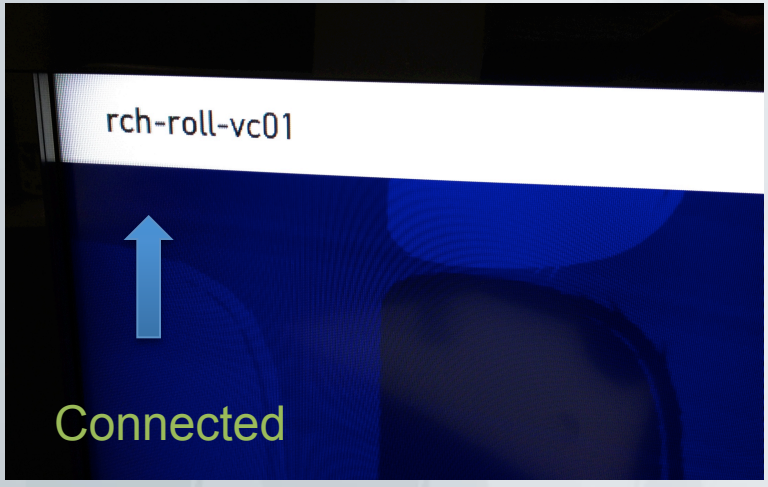
- New meeting in Outlook
- Add meeting room, eg 1.048
- Meeting request will be approved by HELP manager
- Or contact HELP manager

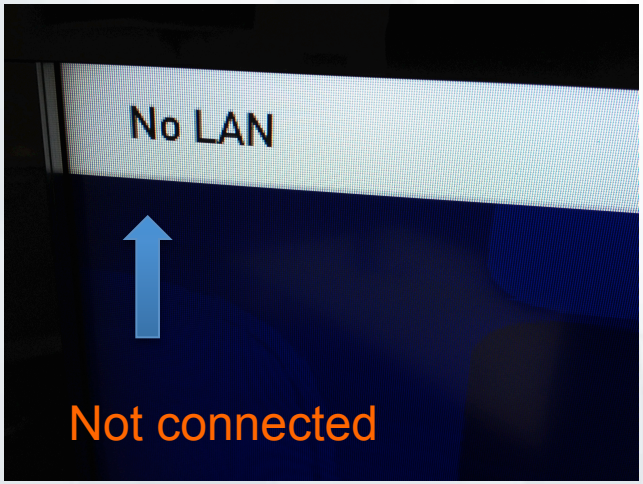
Connecting a roll-about unit

- Connect power plug to power outlet and switch power outlet on (NB: it takes a couple of minutes for the system to startup)
- Connect LAN cable to LAN point
- Place microphone on table

Checking the network connection

Once the system has finished starting up, look at the top left corner of the screen. The ID for the unit should be displayed, eg: **rch-roll-vc01**





NB: not all LAN points are active. Try alternatives or call IT on 56277 and quote LAN point number to resolve

Connecting a PC to share content

- Connect the roll-about VGA cable to VGA output on a PC or laptop.

VGA cable

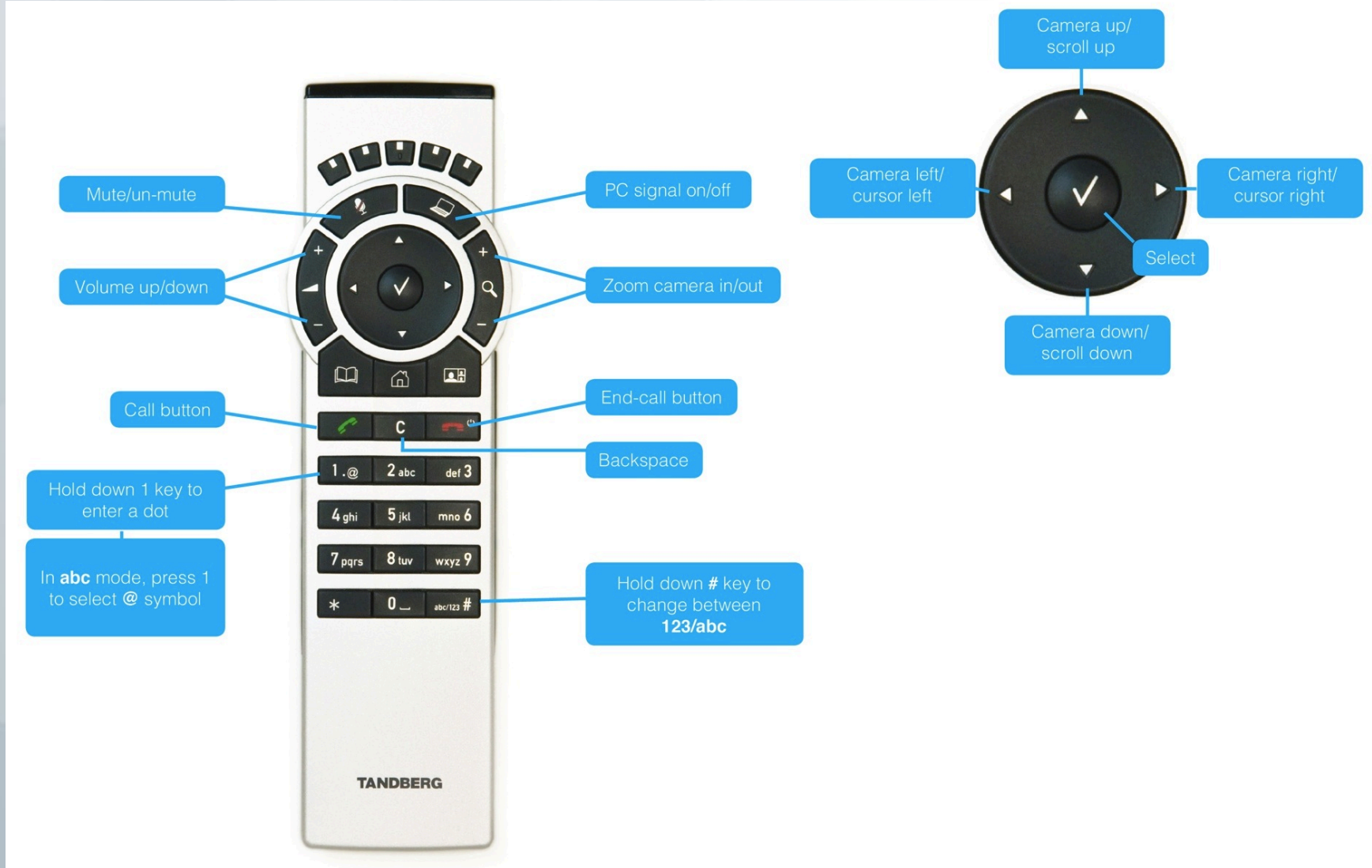
VGA output

- Make sure PC display settings are set to 'Clone Displays'. To clone displays, right click on the desktop and select: **Graphics Options>Output to>Clone Displays>Monitor+Digital Television**

- In meeting rooms, project the PC in the room first. Then, unplug the small desk monitor from the back of the PC. Use this connection output at the rear of the PC to attach the roll-about VGA cable.

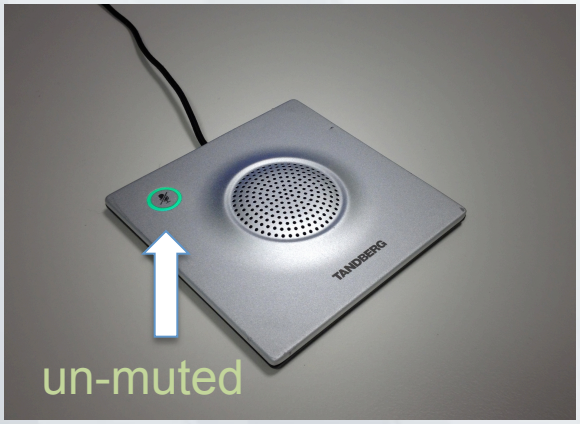
NB: when changing connections, always **note the standard configuration and return the room to this configuration** after your videoconference is complete. Eg, plug the monitor back in.

Using the remote control



Receiving a call

- Provide the connection details to the far end. Connection details are displayed on the home screen of the roll-about unit.
- The unit will automatically answer the incoming call.
- Un-mute the microphone.



Placing a call via IP

- Enter the IP address using the remote control.
- To enter a '**.**' hold down the **1** key.
- To add an **@** symbol, switch to **abc** mode on remote control by holding down the **#** key, then use the **1** key to select **@**
- **Once the IP address is complete, press the green call button**

Some addresses are provided by the far end with **##** in the middle, eg: 203.203.101**##**1234

From an RCH unit, you need to change the address as follows:

1234**@**203.203.101

Internal network addresses

Addresses beginning with **10.** are internal network addresses. They cannot be dialled from outside an organisation's network, i.e. you cannot call them from RCH

Placing a call via ISDN

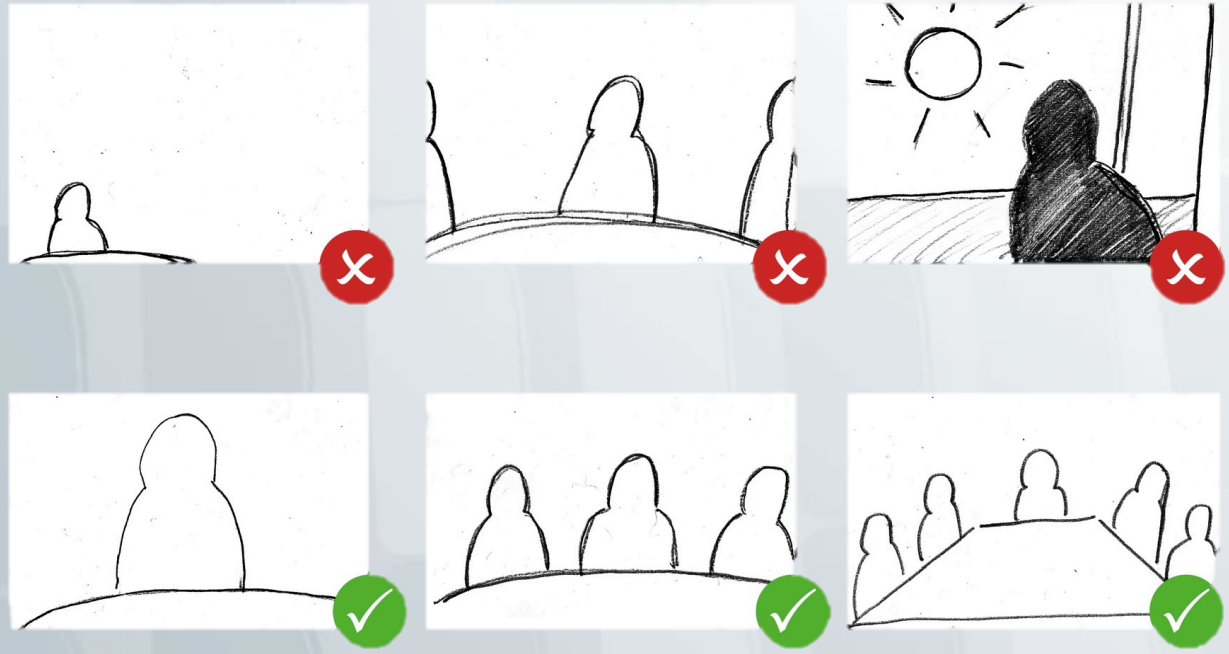
- Use the remote control to start with **#** as a prefix
- Enter the number with area code and no spaces
- E.g. the completed number should look like: #0399555599
- **When complete, press the green call button**

NB: ISDN is to be avoided where possible due to the call costs and inferior quality

It takes longer for the call to connect using ISDN

Changing the camera view

Use the pan, tilt and zoom controls on the remote control to adjust the camera angle.



Sending your PC signal to share content

- Once the PC has been connected and you are in a call, press the PC/laptop button on the remote

- To stop sending the PC signal, press the PC/laptop button again

Ending the call/pack-up

- Press the red call hang-up button to disconnect
- Unplug any PCs and re-connect any monitors
- Switch off roll-about unit at power outlet
- Gently coil cables and pack unit up
- Return to base
- Don’t forget the remote control

Videoconference checklist

1	Establish that the far-end has videoconference capabilities, and share connection details. Decide which site will place the call.
2	Book the meeting room and videoconference equipment via Outlook (allow at least 15 minutes to collect and setup equipment)
3	Arrange to do a test if it's a first time for this connection (book the same equipment for the test)
4	Setup the equipment on the day: • Connect power and switch on • Connect LAN cable and check connection is active • Microphone on table • Connect PC if you want to share a presentation • Adjust camera • Place call or wait to receive call
5	Mute microphone when not talking
6	Pack-up equipment (gently coil cables) and return

Troubleshooting

Common problems at the near end:

- No network connection via LAN point
- Cables unplugged
- Incorrect IP or ISDN numbers

Common problems at the far end:

- Unable to connect to external IP addresses
- Incomplete setup of unit (e.g. sound system not turned on)
- Slow connection speeds or outdated equipment (e.g. some rural areas)

Videoconference troubleshooting guide (roll-about units)

Problem	Possible Cause	Solution	Still not working
Won't connect after pressing call button	No network connection at RCH	Check LAN cable is plugged in and connection is live (eg: rch-roll-vc02 in top left corner of screen)	See next possible cause
	Incorrect IP address	Check your IP address is correct. Remember to change addresses with ## to ones with an @ symbol. You cannot call an address beginning with **10.**	See next possible cause
	Incorrect ISDN number	Make sure you have placed a # before the number. Check the number is correct	Call ERC, x55482
The far end cannot hear you	Microphone mute	Un-mute microphone. Mic light should be green	Call ERC, x55482
You cannot hear the far end	Far end microphone mute	Ask the far end to un-mute their microphone	See next possible cause
	Volume turned down	Check volume using remote control (halfway is adequate)	Call ERC, x55482
The far end cannot see your PC signal	PC not selected	Press the PC/laptop button on remote	See next possible cause
	Incorrectly connected	Check videoconference VGA cable is connected to PC and ensure PC display settings are set to clone displays	Call ERC, x55482

Help!

- Test new connections one or two days before to verify the connection
- Calmly and patiently try to solve the problem one step at a time
- Call ERC if stuck, on extension 55482 or 55477

Stay calm

- Perspective: what constitutes a **real** emergency?
- Communication: panic creates confusion, affects decision-making

Multisite videoconferencing

- A multisite videoconference allows more than two sites to connect.
- A dedicated multisite control unit (MCU) is required to ‘bridge’ the sites.
- The RCH MCU can connect 12 units.
- Must be booked and supervised via ERC.

Videoconference etiquette

- Testing untried connections in advance avoids stress and embarrassment on the day.
- Mute your microphone when not talking.
- Frame the camera appropriately.
- Show appropriate interest even though you are not physically in the same room – the camera is still watching you.
- In multisite conferences, do not share your technical issues with the other participants. Mute your microphone and phone the support number.
- Try not to share intricate content over the videoconference – lots of detail is lost. Share a PDF of your slides in advance if possible.
- Care for the equipment.

Alternatives to videoconferencing

Web-conferencing

- GoToMeeting (ref www.rch.org.au/telehealth)
- Skype (ref IT Help Desk to allow Skype access)
- Apple Facetime from iOS devices

Teleconferencing

- See IT Help Desk for assistance with conferencing telephones

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